



**Professional Services Agreement
CITY OF AUSTIN
RECOMMENDATION FOR COUNCIL ACTION**

AGENDA ITEM NO.: 26
AGENDA DATE: Thu 09/29/2005
PAGE: 1 of 4

SUBJECT: Authorize negotiation and execution of a professional services agreement with DAVID FORD CONSULTING ENGINEERS, INC., Sacramento, CA, for the Flood Early Warning System (FEWS) Evaluation and Improvements in an amount not to exceed \$160,000.

AMOUNT & SOURCE OF FUNDING: Fundings available in the Fiscal Year 2004-2005 Approved Capital Budget of the Watershed Protection and Development Review Department.

FISCAL NOTE: A fiscal note is attached.

REQUESTING Public Works **DIRECTOR'S**
DEPARTMENT: for Watershed Protection and **AUTHORIZATION:** Sondra Creighton
Development Review;

FOR MORE INFORMATION CONTACT: Susan Janek, P.E. - 974-3327; Felix Benavides - 974-7027; Laura Bohl - 974-7064

PRIOR COUNCIL ACTION: N/A

BOARD AND COMMISSION ACTION: N/A

PURCHASING: Best qualification statement of four received.

MBE / WBE: 16.5% MBE and 14.2%WBE subconsultant participation.

The City of Austin's Flood Early Warning System (FEWS) exists to protect our citizens from potential harm due to flooding. Impetus for the installation of FEWS came after the 1981 Memorial Day flood event, which resulted in a significant amount of property damage and thirteen flood related deaths.

Currently FEWS consists of 84 rain gauges, 39 stream level gauges and nine low water crossing barricades with automatic gates. These devices report by radio transmission to a repeater station located on Mt. Larson. Data received at the Mt. Larson repeater station transmit to the base station located at the Combined Transportation, Emergency and Communication Center (CTECC). At CTECC, data are logged and displayed on computers used by FEWS operators. FEWS operators use transmitted rain and stream level gauges in conjunction with Doppler radar; rain forecast models and other publicly available Internet information to provide decision support for the Office of Emergency Management (OEM). Decision support includes issuing alarms based on flooding potential for certain watersheds and known flood-prone areas. These alarms trigger actions related to road closures, park closures and warnings, which include recommendations for evacuation.

FEWS has not been evaluated or upgraded since it was initially installed in the mid 1980's. As a result of the City of Austin's population growth and upgrades in current technology, there is a need to evaluate FEWS and propose recommendations for improvement. This project will require the selected consultant to evaluate the current system and suggest specific recommendations to upgrade FEWS. Specific recommendations include hardware, software, communication and staffing suggestions. The selected consultant will perform their services with the intent of developing a reliable and user-friendly FEWS, which uses real-time precipitation data to predict stream levels, to warn of possible high water levels and flood hazards, and to provide action instructions to operators.



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The consultant will be required to complete various tasks during three project phases. During Phase I, the consultant will provide a System Evaluation and Recommendations Engineering Report. The System Evaluation and Recommendations Engineering Report includes a list of software and hardware options available to FEWS and a list of alternatives for FEWS physical operations. During Phase II, the consultant will provide technical specifications for procurement of software and other equipment. During Phase III, the selected consultant will provide installation engineering services including assisting in the startup of software and initial training of FEWS operators. This authorization provides for funding of services related to Phases I, II, and III.

This request allows for development of a professional service agreement with the recommended firm. Should the City be unsuccessful in negotiating a satisfactory agreement with the recommended firm, negotiations will cease with that firm. Staff will then return to Council and request authorization to begin negotiations with the alternate recommendation listed below.

Notification of issuance of a Request for Qualifications (RFQ) for the subject services was sent to two hundred forty-seven (247) firms on April 7, 2005. The RFQ was obtained by twenty-eight (28) firms, and four (4) firms submitted qualification statements. None of the firms were certified M/WBE firms. Interviewing the four (4) firms results in the following recommendation.

Participation goals stated in the solicitation were 16.5% MBE and 14.2% WBE. The recommended and alternate firms provided an M/WBE Compliance Plan that met the goals of the solicitation and was approved by the Department of Small and Minority Business Resources.



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**RECOMMENDED FIRM: DAVID FORD CONSULTING ENGINEERS, INC., SACRAMENTO, CA
– Total Participation:**

**NON M/WBE TOTAL – PRIME 52.80%
David Ford Consulting Engineers, Inc., Sacramento, CA 52.80%**

MBE TOTAL – SUBCONSULTANT 16.50%

**Asian American Subtotal 16.50%
(MA) Raymond Chan & Associates, Inc., Austin, TX (civil 16.50%
Engineering, hydrological services)**

**WBE TOTAL – SUBCONSULTANT 14.20%
(FR) H2O Partners, Inc., Austin, TX (emergency planning, natural disasters consulting) 14.20%**

**NON M/WBE TOTAL – SUBCONSULTANTS 16.50%
Half Associates, Inc., Austin, TX (civil engineering) 5.50%
Water and Earth Technologies, Inc., Fort Collins, CO (civil engineering) 5.50%
Distinctive AFWS Designs, Inc., Leicester, NC (civil engineering) 5.50%**



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ALTERNATE FIRM: ESPEY CONSULTANTS, INC., AUSTIN, TX – Total Participation:

NON M/WBE TOTAL – PRIME 29.30%
Espey Consultants, Inc., Austin, TX 29.30%

MBE TOTAL – SUBCONSULTANTS 16.50%

Asian American Subtotal 16.50%
(MA) Encotech Engineering Consultants, Inc., Austin, TX (civil 4.50%
engineering)
(MA) Raymond Chan & Associates, Inc., Austin, TX (civil 12.00%
engineering, hydrological & geographic information services)

WBE TOTAL – SUBCONSULTANT 14.20%
(FR) Martha Fererro Juch, P.E., Inc., Round Rock, TX (civil engineering, hydrological 14.20%
and geographic information services)

NON M/WBE TOTAL – SUBCONSULTANTS 40.00%
Vieux & Associates, Norman, OK (civil engineering, hydrological and 22.00%
geographic information services)
P.B. Bedient & Associates, Sugarland, TX (civil engineering, hydrological 18.00%
and geographic information services)

CIP BUDGET FISCAL NOTE

DATE OF COUNCIL CONSIDERATION: 29-Sep-05
WHERE ON AGENDA:
DEPARTMENT: Watershed Protection & Development Review

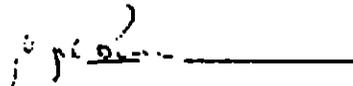
Description: Authorize negotiation and execution of a professional services agreement with DAVID FORD CONSULTING ENGINEERS, INC., SACRAMENTO, CA, for the Flood Early Warning System (FEWS) Evaluation and Improvements in an amount not to exceed \$160,000.

FINANCIAL INFORMATION:

Project Name: FEWS Evaluation
Project Authorization: 2004-2005 Amended Capital Budget
Funding Source: Drainage Utility Fund
Fund/Agency/Orgn: 4850-617-7101

Total Current Appropriation	\$170,000.00
Unencumbered Balance	\$161,130.00
Amount of this Action	<u>(\$160,000.00)</u>
Remaining Balance	<u><u>\$1,130.00</u></u>

Financial Approval:

 _____ Date: 09/06/05

**Public Works Department
Evaluation of Consultant Qualifications**

Compass

Received: Thursday, May 5, 2005

Project: Flood Early Warning System Evaluation and Improvements

EVALUATION MATRIX

Project Manager: Susan Janek, P.E.

Firm (or Joint Venture)	Yes or No EPLS (Currently excluded)	Yes or No Active	Team 1 Yes or No MWBE Goals met or G.F.E.	Team 2 Yes or No Prime Firm's EEO Program	Team 3 [24] Experience of Project Manager (16) Principal (8)	Team 4 [15] Experience and Availability of Proposed Staff	Team 5 [16 who sube] Prime Firm's Comparable Project Experience	Team 6 [15 who sube] Subconsultant Firm's Comparable Project Experience	Team 7 [8] Team's Experience with Austin Issues	Team 8 [12] Team's Structure and Project Approach	Team 9 [11] COA Experience with Prime	Team 10 [100] SUB TOTAL	[25] Optional Interview	[125] TOTAL POINTS
David Ford Consulting Engineers	No	Yes	Yes	Yes	22.00	12.75	14.75	12.75	6.00	11.00	11	90.25	22.13	112.38
Espey Consultants, Inc.	No	Yes	Yes	Yes	15.50	11.75	12.00	12.00	6.75	11.25	11	80.25	19.88	100.13
Turner Collier & Braden, Inc.	No	Yes	Yes	Yes	18.00	11.50	12.50	11.50	7.25	10.25	11	82.00	17.88	99.88
Wallingford Software, Inc.	No	Yes	Yes	Yes	10.50	9.00	11.25	10.25	5.25	8.00	11	65.25	18.65	83.90